

## Alphacool Core Ocean T38 AIO 120mm

Alphacool article number: 13050



### Quick Info

With the Core Ocean AiO, Alphacool presents an all-in-one solution that, thanks to its excellent price-performance ratio, enables entry into performance-oriented CPU water cooling. The choice of components and the design of the Core Ocean enable a long service life with low maintenance for water cooling of all common mainstream sockets from AMD and Intel.

- Compatible with all mainstream sockets from AMD and Intel
- High performance, low maintenance, durable
- Brilliant digital aRGB LED illumination

### Compatibility

Intel: LGA 115x / LGA 1200 / LGA 1700 / LGA 2066

AMD: AM4 / AM5

## Scope of delivery

|                                           |                                    |
|-------------------------------------------|------------------------------------|
| 1x Alphacool Core Ocean T38 AIO 120mm     | 4x LGA 115x, LGA 1200, 1700 Screws |
| 2x LGA 2066, LGA 115x, 1200, 1700 Bracket | 4x LGA 2066 Screws                 |
| 2x AM4 / AM5 Bracket                      | 4x 2mm Washers                     |
| 1x Backplate                              | 4x 0,5mm Washers                   |
| 1x Thermal paste                          | 4x UNC6-32x6 Screws                |
| 4x Springs                                | 4x UNC6-32x30 Screws               |
| 4x AM4 / AM5 Screws                       | 1x 120x120x25mm Fan                |

## Technical data radiator

|                                              |                              |
|----------------------------------------------|------------------------------|
| L x W x H                                    | 153 x 120 x 38mm             |
| Material cooling fins, channels & prechamber | 3003 Aluminium               |
| Material outer housing & threads             | 3003 Aluminium               |
| Fins per Inch                                | 19                           |
| Fan size                                     | 120mm                        |
| Fan slots                                    | 1 one-sided / 2 double-sided |
| Color                                        | black                        |

## Technical data fans

|                                                     |                        |
|-----------------------------------------------------|------------------------|
| L x W x H                                           | 120 x 120 x 25mm       |
| Bearing Type                                        | hydraulic Bearing      |
| Rated Voltage                                       | DC 12V                 |
| Operating Voltage                                   | DC 7-14V               |
| Start-up Voltage                                    | 7V                     |
| Rated Current                                       | 0.23 (Max. 0.4) A      |
| Rated Power                                         | 2.76 (Max. 4.8) W      |
| Rated Speed                                         | 0 - 2500rpm/min (±10%) |
| Max. Air Flow                                       | 62.8CFM                |
| Max.Static Pressure                                 | 2.13mm-H2O             |
| Noise level (rated voltage, mute room, distance 1m) | 33.0 (Max. 34.3) dBA   |
| MTBF                                                | 50000hrs at 25°C       |
| Speed Control Mode                                  | PWM                    |
| Connection & control                                | 4-pin PWM (cable 40cm) |
| Auto-Restart                                        | yes                    |
| Tachometer Output                                   | yes                    |
| Color                                               | black                  |

## Technical data cooler & pump

|                               |                                             |
|-------------------------------|---------------------------------------------|
| L x W x H                     | 70,2 x 70,2 x 46mm                          |
| Material cooler bottom        | copper                                      |
| Material pump housing         | Synthetic material (ABS+PC)                 |
| Fin structure cooler bottom   | 0,1 x 0,1mm                                 |
| Material pump bearing & shaft | ceramics                                    |
| Starting voltage              | > DC 6V                                     |
| Rated power                   | 7.1W                                        |
| Noise level                   | 35Db                                        |
| Rated Current                 | 0.59A (±10% MAX)                            |
| Speed                         | 2500~3500 (±10% RPM)                        |
| Power supply Digital aRGB     | 3-pin 5V (male & female, cable length 30cm) |
| Number of aRGB LEDs           | 12                                          |
| Power supply pump             | 4-Pin JST (Kabellänge 30cm)                 |

## Technical data tubes

|          |                             |
|----------|-----------------------------|
| Material | FEP, black with weave cover |
| Length   | 350mm                       |

## Download links

|                  |                                                                     |
|------------------|---------------------------------------------------------------------|
| Manual           | <a href="#">13050_Alphacool_Core_Ocean_T38_AIO_120mm_Manual.pdf</a> |
| Product pictures | <a href="#">13050_Alphacool_Core_Ocean_T38_AIO_120mm_pics.zip</a>   |

## Packaging dimensions per unit

|           |                    |
|-----------|--------------------|
| L x W x H | 245 x 205 x 155 mm |
| Weight    | 1500 g             |

## Other data

|              |               |
|--------------|---------------|
| Certificates | CE, FC, RoHS  |
| EAN          | 4250197130509 |
| Customs code | 84195080900   |

With the Core Ocean AiO, Alphacool presents an all-in-one solution that, thanks to its excellent price-performance ratio, enables entry into performance-oriented CPU water cooling. The difference to the Eisbaer CPU AiO is that the Ocean All-in-One is not expandable. Adding further components such as GPU coolers, radiators or expansion tanks is not intended here. But also not necessary! The choice of components and the design of the Core Ocean enable a long service life with low maintenance for water cooling of all common mainstream sockets from AMD and Intel.

### **Aluminium Radiator**

Compared to Alphacool's full copper models, the T38 aluminium radiator has additional cooling channels. This technical design allows a significant increase in cooling capacity without restricting the water flow within the radiator. Due to the low height of 38mm, the radiator with single-sided fan assembly fits into the tightest case and enables high-performance water cooling of the CPU.

### **Core fan**

The fan can be regulated from 0 to 2500 rpm via the 4-pin PWM connection. The cable is 40cm long. This allows the fan to be connected to the mainboard or a special controller without the need for additional adapter cables or extensions. At 2500 rpm, it provides an air flow of 62.8 CFM, together with a high static pressure of 2.13mm/H<sub>2</sub>O. This makes the fan perfect for mounting on radiators of a water cooling system.

### **Cooler & Pump**

As with all Alphacool products, the radiator base is made of copper and is equipped with very fine cooling fins distributed over the entire base. A nozzle plate ensures an accelerated flow over the cooling fins, which increases the cooling performance. The water flow is optimised so that all areas of the cooler base are cooled evenly. The cooler is compatible with all common mainstream sockets from AMD and Intel. The built-in pump has a speed range of 2500 - 3500 RPM (+/- 10%) and can be controlled via PWM. The pump is connected to the mainboard or to an external controller via the existing 4-pin fan connector. This allows the speed range of the pump to be controlled and monitored.

### **Hoses & Connections**

The FEP hoses are 40cm long, sleeved and very flexible. The rotatable 360° connections to the cooler and to the radiator are permanently installed and cannot be replaced. However, the combination of hoses and connectors allows a very variable positioning of the AiO even in the tightest PC case.

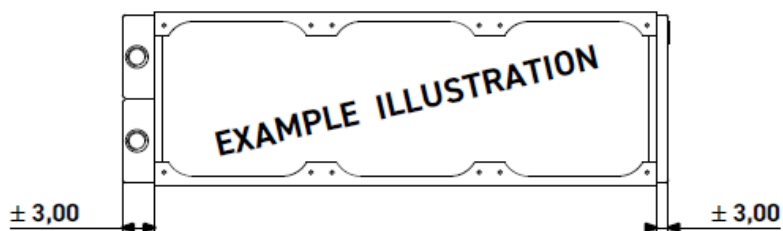
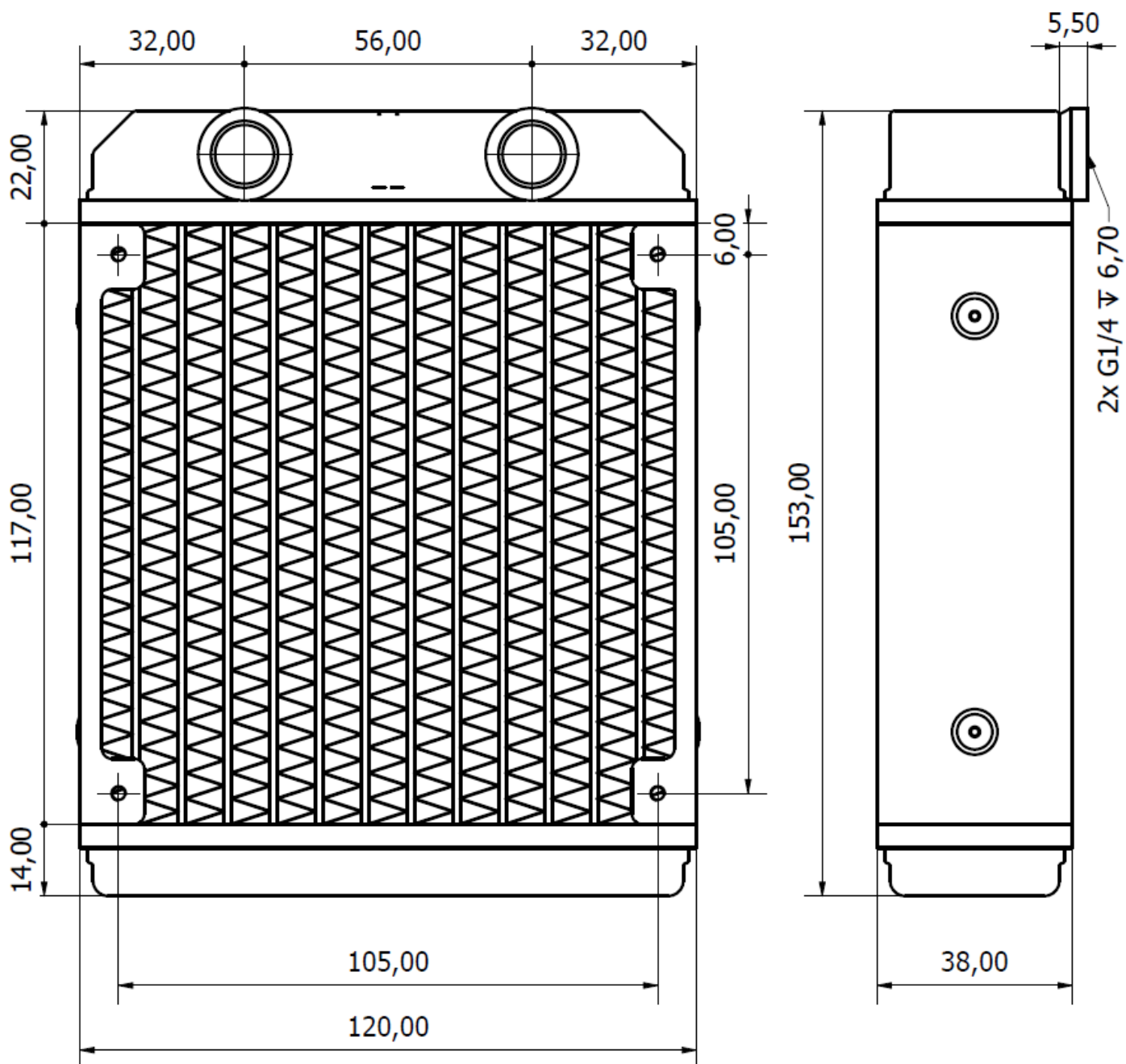
### **Illumination**

12 digitally addressable 5V RGB LEDs are installed in the pump housing, which create a unique, very noble-looking illumination. The digital aRGB LED lighting is connected via a JST 3-pin connector. To control the lighting, the 3-pin female connector must be connected to a digital RGB controller (not included) or a digital RGB-capable mainboard. Additional digital RGB LEDs can be connected to the remaining 3-pin male connector.

### **Thermal compound**

The thermal paste included in the delivery has a thermal conductivity of 7.5 W/mK. The thermal grease does not harden, is particularly suitable for high contact pressures and can be applied perfectly due to the optimally selected viscosity.

# Drawing (1)



Tolerance of all the end tanks  
 General tolerance:  $\pm 0,75$   
 Dimension in millimeter

